

CLAIM AMENDMENTS

1-99. Cancelled.

100. (Previously Presented) An isolated immunogenic peptide consisting of a portion of SEQ ID NO: 39, wherein said portion comprises (i) at least 9 contiguous amino acids from amino acids 56-70 of SEQ ID NO: 39 or (ii) at least 9 contiguous amino acids from amino acids 448-462 of SEQ ID NO: 39, wherein the immunogenic peptide is about 9 to about 34 amino acids in length and is recognized by a CD4⁺ T lymphocyte, which is restricted by a Major Histocompatibility Complex (MHC) Class II molecule.

101. Cancelled.

102. (Previously Presented) The immunogenic peptide of claim 100, wherein the portion comprises of amino acids 56-64 and 66-70 of SEQ ID NO: 39 and wherein amino acid 65 of SEQ ID NO: 39 is substituted with a valine.

103. (Previously Presented) The immunogenic peptide of claim 100, wherein the portion comprises amino acids 448-450 and 452-462 of SEQ ID NO: 39 and wherein amino acid 451 of SEQ ID NO: 39 is substituted with a phenylalanine.

104-106. Cancelled.

107. (Previously Presented) The isolated immunogenic peptide of claim 100, wherein the peptide consists of amino acids 56-70 of SEQ ID NO: 39.

108. (Previously Presented) The isolated immunogenic peptide of claim 100, wherein the peptide consists of amino acids 448-462 of SEQ ID NO: 39.

109. (Previously Presented) The isolated immunogenic peptide of claim 100, wherein the peptide consists of amino acids 57-70 of SEQ ID NO: 39.

110. (Previously Presented) The isolated immunogenic peptide of claim 100, wherein the peptide consists of amino acids 449-462 of SEQ ID NO: 39.

111. (Previously Presented) The isolated immunogenic peptide of claim 100, wherein the peptide consists of amino acids 450-462 of SEQ ID NO: 39.

112. (Previously Presented) The immunogenic peptide of claim 100, wherein the MHC Class II molecule is Human Leukocyte Antigen (HLA)-DR.

113. (Previously Presented) The immunogenic peptide of claim 112, wherein the HLA-DR is HLA-DRB1*0401.

114. (Previously Presented) The immunogenic peptide of claim 100 linked to an MHC Class II molecule, or a portion thereof.

115. (Previously Presented) The immunogenic peptide of claim 114, wherein the portion of the MHC Class II molecule is the β chain of the MHC Class II molecule.

116. (Previously Presented) A composition comprising an immunogenic peptide of claim 100.

117. (Previously Presented) A composition comprising an immunogenic peptide of claim 114.

118. (Previously Presented) A method of inducing $CD4^+$ T lymphocytes to respond to melanoma, which method comprises:

- (i) contacting antigen presenting cells with a composition of claim 116 *in vitro*, and
- (ii) simultaneously or subsequently exposing $CD4^+$ T lymphocytes to the antigen presenting cells *in vitro*,

whereupon the $CD4^+$ T lymphocytes are induced to respond to melanoma.

119. (Previously Presented) The method of claim 118, wherein the $CD4^+$ T lymphocytes are obtained from a host and the method further comprises:

- (iii) administering the $CD4^+$ T lymphocytes to the host.

120. (Previously Presented) The method of claim 119, wherein the host is a mammal.

121. (Previously Presented) The method of claim 120, wherein the mammal is a human.

122. (Previously Presented) The method of claim 119, wherein the antigen presenting cells are obtained from the host.

123. (Previously Presented) A method of inducing CD4⁺ T lymphocytes in a host to respond to melanoma, which method comprises:

- (i) contacting antigen presenting cells with a composition of claim 116 *in vitro*, and
- (ii) subsequently exposing CD4⁺ T lymphocytes in the host to the antigen presenting cells by administering the antigen presenting cells to the host, whereupon the CD4⁺ T lymphocytes in the host are induced to respond to melanoma.

124. (Previously Presented) The method of claim 123, wherein the host is a mammal.

125. (Previously Presented) The method of claim 124, wherein the mammal is a human.

126. (Previously Presented) The method of claim 123, wherein the antigen presenting cells are obtained from the host.

127. (Previously Presented) A method of inducing CD4⁺ T lymphocytes in a host to respond to melanoma, which method comprises administering the composition of claim 116 to the host, whereupon the CD4⁺ T lymphocytes in the host are induced to respond to melanoma.

128. (Previously Presented) A method of inducing CD4⁺ T lymphocytes to respond to melanoma, which method comprises:

- (i) contacting antigen presenting cells with a composition of claim 117 *in vitro*, and
- (ii) simultaneously or subsequently exposing CD4⁺ T lymphocytes to the antigen presenting cells *in vitro*,

whereupon the CD4⁺ T lymphocytes are induced to respond to melanoma.

129. (Previously Presented) The method of claim 128, wherein the CD4⁺ T lymphocytes are obtained from a host and the method further comprises:

(iii) administering the CD4⁺ T lymphocytes to the host.

130. (Previously Presented) The method of claim 129, wherein the host is a mammal.

131. (Previously Presented) The method of claim 130, wherein the mammal is a human.

132. (Previously Presented) The method of claim 129, wherein the antigen presenting cells are obtained from the host.

133. (Previously Presented) A method of inducing CD4⁺ T lymphocytes in a host to respond to melanoma, which method comprises:

(i) contacting antigen presenting cells with a composition of claim 117 *in vitro*, and

(ii) subsequently exposing CD4⁺ T lymphocytes in the host to the antigen presenting cells by administering the antigen presenting cells to the host, whereupon the CD4⁺ T lymphocytes in the host are induced to respond to melanoma.

134. (Previously Presented) The method of claim 133, wherein the host is a mammal.

135. (Previously Presented) The method of claim 134, wherein the mammal is a human.

136. (Previously Presented) The method of claim 133, wherein the antigen presenting cells are obtained from the host.

137. (Previously Presented) A method of inducing CD4⁺ T lymphocytes in a host to respond to melanoma, which method comprises administering the composition of claim 117

to the host, whereupon the CD4⁺ T lymphocytes in the host are induced to respond to melanoma.

138. (Currently Amended) ~~An isolated derivative of the immunogenic peptide of claim 100, consisting of a portion of SEQ ID NO: 39, wherein the derivative portion comprises at least 9 amino acids from amino acids 56-70 of SEQ ID NO: 39 or comprises at least 9 amino acids from amino acids 448-462 of SEQ ID NO: 39, wherein said portion comprises an amino acid substitution of the at least 9 amino acids from amino acids 56-70 of SEQ ID NO: 39 or of the at least 9 amino acids from amino acids 448-462 of SEQ ID NO: 39, with at least one amino acid substitution selected from the group consisting of: (i) A63V; (ii) D456V; (iii) I58F; (iv) I58V; (v) L60F; (vi) L60Q; (vii) Y449F; and (viii) Y449Q; wherein said peptide is about 9 to about 34 amino acids in length, and is recognized by a CD4⁺ T lymphocyte, which is restricted by a MHC Class II molecule.~~ is selected from the group consisting of (i) a peptide consisting essentially of amino acids 56-62 and 64-70 of SEQ ID NO: 39 and wherein amino acid 63 of SEQ ID NO: 39 is substituted with a valine; (ii) a peptide consisting essentially of amino acids 448-455 and 457-462 of SEQ ID NO: 39 and wherein amino acid 456 of SEQ ID NO: 39 is substituted with a valine; (iii) a peptide consisting essentially of amino acids 450-455 and 457-462 of SEQ ID NO: 39 and wherein amino acid 456 of SEQ ID NO: 39 is substituted with a valine; (iv) a peptide consisting essentially of amino acids 56, 57, and 59-70 of SEQ ID NO: 39 and wherein amino acid 58 of SEQ ID NO: 39 is substituted with a phenylalanine or a valine; and (v) a peptide consisting essentially of amino acids 448 and 450-462 of SEQ ID NO: 39 and wherein amino acid 449 of SEQ ID NO: 39 is substituted with a phenylalanine or a glutamine.

139. (Currently Amended) ~~The derivative isolated immunogenic peptide of claim 138, wherein MHC Class II is HLA-DR.~~

140. (Currently Amended) ~~The derivative isolated immunogenic peptide of claim 139, wherein the HLA-DR is HLA-DRB1*0401.~~

141. (Currently Amended) ~~The derivative isolated immunogenic peptide of claim 138 linked to an MHC Class II molecule, or a portion thereof.~~

142. (Currently Amended) The derivative isolated immunogenic peptide of claim 141, wherein the portion of the MHC Class II molecule is the β chain of the MHC Class II molecule.

143. (Currently Amended) A composition comprising an isolated derivative immunogenic peptide of claim 138.

144. (Currently Amended) A composition comprising an isolated derivative immunogenic peptide of claim 141.

145. (Previously Presented) A method of inducing $CD4^+$ T lymphocytes to respond to melanoma, which method comprises:

- (i) contacting antigen presenting cells with a composition of claim 143 *in vitro*, and
- (ii) simultaneously or subsequently exposing $CD4^+$ T lymphocytes to the antigen presenting cells *in vitro*,

whereupon the $CD4^+$ T lymphocytes are induced to respond to melanoma.

146. (Previously Presented) The method of claim 145, wherein the $CD4^+$ T lymphocytes are obtained from a host and the method further comprises:

- (iii) administering the $CD4^+$ T lymphocytes to the host.

147. (Previously Presented) The method of claim 146, wherein the host is a mammal.

148. (Previously Presented) The method of claim 147, wherein the mammal is a human.

149. (Previously Presented) The method of claim 146, wherein the antigen presenting cells are obtained from the host.

150. (Previously Presented) A method of inducing $CD4^+$ T lymphocytes in a host to respond to melanoma, which method comprises:

- (i) contacting antigen presenting cells with a composition of claim 143 *in vitro*, and

(ii) subsequently exposing CD4⁺ T lymphocytes in the host to the antigen presenting cells by administering the antigen presenting cells to the host, whereupon the CD4⁺ T lymphocytes in the host are induced to respond to melanoma.

151. (Previously Presented) The method of claim 150, wherein the host is a mammal.

152. (Previously Presented) The method of claim 151, wherein the mammal is a human.

153. (Previously Presented) The method of claim 150, wherein the antigen presenting cells are obtained from the host.

154. (Previously Presented) A method of inducing CD4⁺ T lymphocytes in a host to respond to melanoma, which method comprises administering the composition of claim 143 to the host, whereupon the CD4⁺ T lymphocytes in the host are induced to respond to melanoma.

155. (Previously Presented) A method of inducing CD4⁺ T lymphocytes to respond to melanoma, which method comprises:

- (i) contacting antigen presenting cells with a composition of claim 144 *in vitro*, and
- (ii) simultaneously or subsequently exposing CD4⁺ T lymphocytes to the antigen presenting cells *in vitro*,

whereupon the CD4⁺ T lymphocytes are induced to respond to melanoma.

156. (Previously Presented) The method of claim 155, wherein the CD4⁺ T lymphocytes are obtained from a host and the method further comprises:

- (iii) administering the CD4⁺ T lymphocytes to the host.

157. (Previously Presented) The method of claim 156, wherein the host is a mammal.

158. (Previously Presented) The method of claim 157, wherein the mammal is a human.

159. (Previously Presented) The method of claim 156, wherein the antigen presenting cells are obtained from the host.

160. (Previously Presented) A method of inducing CD4⁺ T lymphocytes in a host to respond to melanoma, which method comprises:

- (i) contacting antigen presenting cells with a composition of claim 144 *in vitro*, and
- (ii) subsequently exposing CD4⁺ T lymphocytes in the host to the antigen presenting cells by administering the antigen presenting cells to the host, whereupon the CD4⁺ T lymphocytes in the host are induced to respond to melanoma.

161. (Previously Presented) The method of claim 160, wherein the host is a mammal.

162. (Previously Presented) The method of claim 161, wherein the mammal is a human.

163. (New) The method of claim 160, wherein the antigen presenting cells are obtained from the host.

164. (Previously Presented) A method of inducing CD4⁺ T lymphocytes in a host to respond to melanoma, which method comprises administering the composition of claim 144 to the host, whereupon the CD4⁺ T lymphocytes in the host are induced to respond to melanoma.

165-191. Cancelled.